

Rocky thicket, Fairfield, Parish of Manchester, Jamaica, September 3-7, 1909 (*Britton 3147*).

In Mr. Wernham's arrangement this comes next to *H. ventricosa* Sw., and is, in fact, nearest related to that species, which has different foliage, larger corolla and much smaller seeds.

The leaves of *H. scabrida* are quite as papillose as those of *H. papillosa* Urban of the Jamaica Cockpit Country, which has very much smaller flowers and globose fruits over 1 cm. in diameter.

FOSSIL FLOWERS AND FRUITS.—II

BY T. D. A. COCKERELL

The genus *Robinia* was formerly distributed over the Palaearctic region, as shown by a number of well-preserved fossils in the European Tertiary. A species (*R. arvernensis* Laurent) flourished in south-central France as late as the "Mio-pliocene." Probably the genus died out in Europe during the glacial period. At the present time conditions are well suited to *R. pseudacacia*, which has run wild extensively. In America, we have a species (*R. Brittoni* Ckll.) from the Florissant Miocene but it might have been supposed that the genus was really of Old World origin, and came over to America in Miocene times. Such an idea seems to be negatived by the discovery of pods of an apparently genuine *Robinia* in the Laramie Cretaceous.

Robinia mesozoica n. sp.

Pods of the same size and general appearance as those of the modern *R. pseudacacia* L.; base moderately tapering; apex with a short oblique point but otherwise rather obtuse; breadth of a large pod 14 mm., of a smaller but apparently mature one 10; wing-margin very distinct, nearly 3 mm. broad in the larger pod; seeds placed almost transversely, the obliquity very slight, as in the modern *R. pseudacacia*. Neither pod shows the whole length.

Collected by Mr. N. E. Hinds in sandstone, south side of a yellow cliff a few miles north of Whitely Peak, which is about

25 miles north of Kremmling, Colorado; Aug. 27, 1911. The formation was at first supposed to be Mesa Verde, but there seems to be no doubt that it is Laramie. A leaf of "*Platanus*" *Raynoldsii* Newberry is on the same piece of rock, one side touching the pods. The specific name chosen may be considered to

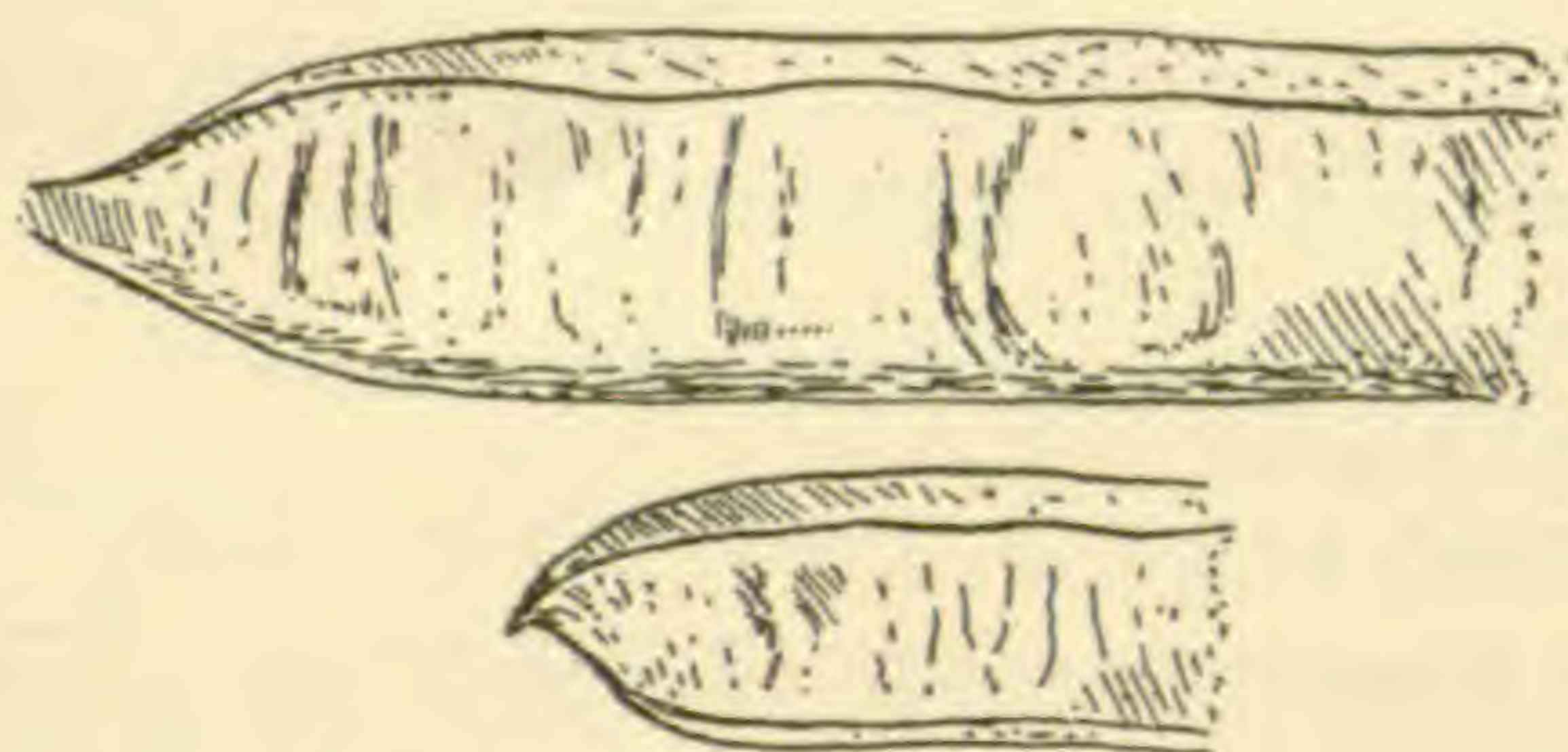


FIG. 1. *Robinia mesozoica*.

refer to the fact that the plant comes from the late Mesozoic, and also to its occurrence in that middle period of time, between the typical Mesozoic and the dawn of the Tertiary, represented by the Laramie and other formations.

A similar pod, possibly also a *Robinia*, has been described by Knowlton from the Yellowstone as *Acacia lamarensis*. The chief difference is that in the Laramie plant the seeds are placed very obliquely in the pod.

Leucaena coloradensis Cockerell

A very good pod of this species, containing a number of seeds, was found by Mr. Geo. N. Rohwer at station 17 in the Miocene shales of Florissant. The seeds are obliquely placed, exactly as in the living *L. Greggii* Watson, and are about 6 mm. long and 4.33 broad; their apices are about 2 mm. distant from the opposite margin of the pod.

BOULDER, COLORADO.

SHORTER NOTES

NEW NAMES FOR GAMOPETALOUS PLANTS.—In order to show correct relationship with accepted genera the following nomenclatorial changes are proposed.

Amarella Hartwegi (Benth.) n. comb.; *Gentiana Hartwegi* Benth.
Pl. Hartw. 47. 1840.